

B' selected from the group consisting of a fibre, filament, coating, film, lining, tube, pipe, sheath, sheet, and panel.

REMARKS

Claims 11-20 are pending in this application. Claims 11-13, 15-20 have been rejected.

Claims 11-13 and 15-17 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over each of Benicewicz '612 and '011. The Examiner asserts that each of the references teaches liquid crystal compounds having ester or amide linkages in the backbone and terminated by imide groups that are used to form thermoset polyesters or polyamides. She states that the claimed oligomers do not distinguish over the low molecular weight diester and diamide liquid crystal compounds of the references or it would have been obvious to form mixtures of the diesters or diamides and use for their intended purpose of forming thermoset polyesters or polyamides.

Applicants respectfully traverse the Examiner's rejection of claims 11-13 and 15-17 under 35 U.S.C. 102(b) and 35 U.S.C. 103 in view of Benicewicz '612 and '011. Specifically, Applicants point to page 8, lines 22-26 of the specification for the definition of the term "oligomer." Applicants define oligomer as having the weight range of approximately 1,000 to approximately 15,000 grams per mole. MPEP 2173.05(a) clearly states that a patentee is free to be his or her lexicographer.

By indicating her willingness to allow claim 14, the Examiner concedes that this particular weight range is novel and non-obvious in view of the cited art. Applicants believe claims 11-13, 15-17 are novel and non-obvious, therefore, a rejection under 35 U.S.C. 102 and 103 is improper.

Claims 12 and 18-20 are rejected under 35 U.S.C. 112, first paragraph, because the Examiner asserts that the specification, while being enabling for oligomers having a liquid crystal backbone selected from ester, ester-amide and ester-imide and self reactive end caps as defined in claim 12, does not reasonably provide enablement for oligomers having a liquid crystal backbone having one structural unit and self reactive end caps as defined in claim 12. The Examiner claims that the specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims and that the only liquid crystal oligomeric backbones that Applicants have taught how to make are ester, ester-amide and ester-imide. (See the specification at pages 5 through 7.)

Applicants respectfully traverse the Examiner's rejection under 35 U.S.C. 112. Specifically, Applicants point to page 6, lines 9-12 of the specification, and Figures 1-4. The specification states that the preferred embodiments are depicted in Fig. 1, wherein R is the structural units depicted in Fig. 2 and Ar is the structural units depicted in Fig. 3 and X is the structural units depicted in Fig. 4. The specification provides enablement for claims 12, 18-20, therefore, a rejection under 35 U.S.C. 112 is improper.

Claim 17 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. The Examiner states that claim 17 is indefinite because there is no antecedent basis for polymer product in claim 11.

Applicants have amended claim 17 to address the Examiner's concern regarding lack of antecedent basis.

Please also note that Applicants are submitting an Information Disclosure Statement concurrently with this response.

Attached hereto is a marked-up version of the changes made to the claims. The attached page is captured "Version with Markings to Show Changes Made."

CONCLUSION

Applicants submit the claims are allowable over the cited art. An early allowance of the claims is requested.

Respectfully submitted,

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Version with Markings to Show Changes Made

17. (Amended) The polymer product of claim [11] 16 wherein said product is a form selected from the group consisting of a fibre, filament, coating, film, lining, tube, pipe, sheath, sheet, and panel.